This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method ~~executed in an apparatus for~~ of generating graphics data ~~indicating shape features of three-dimensional graphics based on X, Y and Z coordinate values~~, the method comprising the steps of:

determining X and Y coordinate values of a shape specific point, the shape specific point being one of a plurality of points ~~for~~ specifying the shape of ~~said~~ a three-dimensional ~~graphics~~graphic;

generating a random number using two types of mutually different random number generating functions using the X and Y coordinate values as seeds;

calculating a Z coordinate value of said shape specific point based on the generated random number; and

generating said graphics data based on the Z coordinate value and the X and Y coordinate values of said shape specific point.

2. (cancelled)

3. (currently amended) A method ~~executed in an apparatus~~ for generating graphics data ~~indicating shape features of three-dimensional graphics based on X, Y and Z coordinate values~~, the method comprising the steps of:

provisionally setting a shape specific point ~~provisionally~~ among a plurality of shape specific points ~~for~~ specifying the shape of ~~said~~ a three-dimensional ~~graphics~~graphic;

calculating X and Y coordinate values of said provisionally set shape specific point and generating a random number using two types of mutually different random number generating functions using the X and Y coordinate values as seeds;

calculating a Z coordinate value of said provisionally set shape specific point based on the generated random number; and

using the point including the calculated X, Y and Z coordinate values as a new shape specific point and generating said graphics data based on said ~~the~~ new shape specific point.

4. (currently amended) The graphics data generating method according to claim 3, wherein the X and Y coordinate values of said new shape specific point are the X and Y coordinate values of a midpoint of a virtual line connecting ~~between~~ a pair of said plurality of shape specific points ~~which is the basis thereof~~.

5. (currently amended) The graphics data generating method according to claim 3, wherein the X and Y coordinate values of said new shape specific point are the X and Y coordinate values of a midpoint of a virtual line connecting a midpoint of a first side of a quadrangle formed on a projecting plane when each of two pairs of said plurality of shape specific points ~~which are the basis thereof~~ is projected onto an~~the~~ XY plane, and a midpoint of a second side of said quadrangle facing said first side.

6. (cancelled)

7. (currently amended) A method ~~executed in an apparatus~~ for generating graphics data ~~indicating shape features of two-dimensional graphics based on X and Y coordinate values~~, the method comprising the steps of:

provisionally setting a shape specific point between a pair of neighboring shape specific points of a plurality of shape specific points specifying the shape of a two-dimensional graphic when said ~~a~~ plurality of shape specific points ~~for~~

~~specifying the shape of said two-dimensional graphics is~~ are projected onto an ~~the~~ X-axis, wherein a position of at least one of said plurality of shape specific points is expressed by a default coordinate value and a variable coordinate value, the default coordinate value being the X coordinate value of the at least one shape specific point and the variable coordinate value being the Y coordinate value of the at least one shape specific point;

generating a random number using the X coordinate value of ~~the~~ said provisional shape specific point as a seed of random numbers;

calculating the Y coordinate value based on the generated random number; and

using the point including the calculated X and Y coordinate values as a new shape specific point and generating said graphics data based on the new shape specific point.

8. (currently amended) A graphics generating apparatus for generating ~~two-dimensional or three-dimensional~~ graphics whose shape features are specified by positions of a plurality of shape specific points, comprising:

a random number generator for generating a random number whose value is determined according to ~~a seed~~ an entered seed; and

a determinator for determining positions of said plurality of shape specific points, wherein, for a two-dimensional graphic,

the position of at least one of said plurality of shape specific points is expressed by a first default coordinate ~~values~~ value being an X coordinate value and a first variable coordinate ~~values~~ value being a Y coordinate value, and

~~——~~ said determinator instructs said random number generator to generate a random number using said first default coordinate ~~values at one of said shape specific points~~ as said seed and

determines the position of said at least one shape specific point by calculating said first variable coordinate ~~values~~ value based on ~~the~~ said random number.

9. (currently amended) The graphics generating apparatus according to claim 8, wherein when there ~~is~~ are a plurality of said first default coordinate values, said determinator generates said random number using random number generating functions, each said generating function differing from one of said first default coordinate values to another.

10. (currently amended) The graphics generating apparatus according to claim 8, wherein said graphics ~~is a~~include three-dimensional graphics based on ~~the~~ X, Y and Z coordinate values, wherein the position of at least one of said plurality of shape specific points is expressed by second default coordinate values and a second variable coordinate value such that a graphic of said three-dimensional graphics has as two of

~~——~~said second default coordinate values ~~are~~ the X and Y coordinate values of said at least ~~any~~ one of said plurality of shape specific points, and

said second variable coordinate value is the Z coordinate value of said at least ~~any~~ one of said shape specific points.

11. (cancelled)

12. (currently amended) The graphics generating apparatus according to claim 8, wherein said three-dimensional graphics ~~is~~ are three-dimensional fractal graphics, and said at least one shape specific point is determined to have at least substantially the same position, whether the position is determined through one route or through another route. ~~which~~

~~will probably reach the same point through a plurality of paths.~~

13. (currently amended) The graphics generating apparatus according to claim 10, wherein said graphic generation apparatus further ~~comprising~~comprises:

a storage unit for storing the X, Y and Z coordinate values of at least two of said plurality of shape specific points; and

a shape specific point generator for specifying the positions of shape specific points based on the X, Y and Z coordinate values of a pair of said shape specific points read from ~~the~~ said storage unit and for generating a new shape specific point at a midpoint of a virtual line connecting the pair ~~between the specified~~ of shape specific points ~~as a new shape specific point~~, wherein

said determinator instructs said random number generator to generate a random number using the X and Y coordinate values of said new shape specific point as said seed and determines the position of said new shape specific point by calculating the Z coordinate value of said new shape specific point based on the random number.

14. (currently amended) The graphics generating apparatus according to claim ~~10~~ 13, wherein ~~said graphic generation apparatus further comprising:~~

~~a storage unit for storing X, Y and Z coordinate values of at least some of said plurality of shape specific points; and~~

said shape specific point generator is operable to initially generate a plurality of said new shape specific points at a plurality of said midpoints of a plurality of said virtual lines connecting respective pairs of said shape specific points read from said storage unit when said pairs of said shape specific points are projected onto an XY plane, and is operable to newly generate new shape specific points from said initially generated

new shape specific points, said newly generated new shape specific points being located at midpoints of second virtual lines connecting respective pairs of said initially generated new shape specific points.~~a shape specific point generator for generating a midpoint of a virtual line connecting between a midpoint of a first side of a quadrangle formed on a projecting plane when each of two pairs of shape specific points read from the storage unit is projected onto the XY plane, and a midpoint of a second side facing said first side as a new shape specific point, wherein~~

~~said determinator instructs said random number generator to generate a random number using the X and Y coordinate values of said new shape specific point as said seed and determines the position of said new shape specific point by calculating the Z coordinate value of said new shape specific point based on the random numbers.~~

15. (currently amended) The graphics generating apparatus according to claim 14, wherein said shape specific point generator repeatedly newly generates ~~repeatedly~~ said new shape specific points according to external instructions using the last newly generated new shape specific points as said initially generated new shape specific points, and

each time said new shape specific points are newly generated, said determinator changes ~~the~~ a range of number values over which~~generating~~ said random numbers are allowed to vary. ~~every time a new shape specific point is generated.~~

16. (original) The graphics generating apparatus according to claim 14, wherein said storage unit additionally stores the X, Y and Z coordinate values of said new shape specific points generated as the shape specific points to be read.

17. (currently amended) A semiconductor device incorporated in an apparatus ~~provided with~~ having a random number generator for generating a random number, ~~whose~~ the random number having a value ~~is~~ determined according to an entered seed ~~entered~~, the apparatus being operable to generate ~~for generating two-dimensional or three-dimensional~~ graphics whose shape features are specified according to the positions of a plurality of shape specific points ~~in coordination with the apparatus~~, wherein the position of at least one of said plurality of shape specific points is expressed by default coordinate values and variable coordinate values, said semiconductor device comprising:

means for instructing said random number generator to generate the~~a~~ random number using said default coordinate values at any one of said shape specific points as said seed and determining the position of said one shape specific point by calculating said variable coordinate values based on the random number~~s~~.

18. (currently amended) The semiconductor device according to claim 17, wherein ~~there is a plurality of said existing coordinate values,~~ said random number generator generates said random number using a plurality of random number generating functions using a plurality of existing ones of said default coordinate values, each said generating function differing from one of said default coordinate value~~s~~ to another.

19-20. (cancelled)

21. (new) A graphics generating apparatus for generating graphics whose shape features are specified by positions of a plurality of shape specific points, comprising:

a random number generator for generating a random number whose value is determined according to an entered seed; and

a determinator for determining the positions of said plurality of shape specific points, wherein

the position of at least one of said plurality of shape specific points is expressed by at least two default coordinate values and at least one variable coordinate value, and

said determinator instructs said random number generator to generate a random number using at least two types of mutually different random number generating functions using said at least two default coordinate values at one of said shape specific points as said seed and said determinator determines the position of said at least one shape specific point by calculating said variable coordinate value based on said random number.

22. (new) A machine-readable recording medium having instructions recorded thereon for performing a method of generating graphics data, the method comprising:

determining X and Y coordinate values of a shape specific point, the shape specific point being one of a plurality of points specifying the shape of a three-dimensional graphic;

generating a random number using two types of mutually different random number generating functions using the X and Y coordinate values as seeds;

calculating a Z coordinate value of said shape specific point based on the generated random number; and

generating said graphics data based on the Z coordinate value and the X and Y coordinate values of said shape specific point.